Appl. No.: 10/706,138

Docket No.: 0020-5190P

January 25, 2005 Art Unit: 2817

Page 2 of 14

AMENDMENT TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

- 1. (currently amended) A power amplification circuit comprising:
 - a power amplifier; and
- a negative feedback circuit connected between a grounding terminal of the power amplifier and ground,

wherein

the negative feedback circuit a diode has a variable impedance characteristic, and

wherein

impedance of the negative feedback circuit depends on a signal voltage occurring across the negative feedback circuit.

2. (original) The power amplification circuit according to Claim 1, wherein

the impedance of the negative feedback circuit decreases as the signal voltage occurring across the negative feedback circuit increases.

3. (currently amended) The power amplification circuit according to Claim 1, wherein A power amplification circuit comprising:

a power amplifier; and

Appl. No.: 10/706,138

Docket No.: 0020-5190P

January 25, 2005 Art Unit: 2817

Page 3 of 14

a negative feedback circuit connected between a power signal input terminal and a power signal output terminal of the power amplifier,

wherein

impedance of the negative feedback circuit depends on a signal voltage occurring across the negative feedback circuit, and

wherein

the negative feedback circuit is a series connection circuit in which a diode and a capacitance device are connected in series or a series connection circuit in which a diode, a capacitance device and a feedback resistor are connected in series, wherein the diode has a variable impedance characteristic, and

a connecting point between the diode and the capacitance device is grounded via a grounding resistor, and

wherein

a bias power supply for the power amplifier is connected to one end of the series connection circuit so that the diode is biased.

4. (original) The power amplification circuit according to Claim 3, wherein

the diode is constituted of a junction between two terminals out of base, collector and emitter of a bipolar transistor.

5. (original) The power amplification circuit according to Claim 4, wherein

Appl. No.: 10/706,138 Docket No.: 0020-5190P

> January 25, 2005 Art Unit: 2817

> > Page 4 of 14

the power amplifier is constituted of a bipolar transistor,

the bipolar transistor constituting the diode and the bipolar transistor used for the power amplifier are generally equal to one another in bias-current temperature characteristics.

6. (original) The power amplification circuit according to Claim 3, wherein

the diode is constituted of a junction between two terminals out of gate, drain and source of a field effect transistor.

7. (currently amended) A communication device comprising:

<u>a power amplification circuit</u>, the power amplification circuit comprising:

a power amplifier; and

a negative feedback circuit connected between a power signal input terminal and a power signal output terminal of the power amplifier,

wherein

impedance of the negative feedback circuit depends on a
signal voltage occurring across the negative feedback circuit, and
wherein

the negative feedback circuit is a series connection circuit in which a diode and a capacitance device are connected in series or a series connection circuit in which a diode, a

Appl. No.: 10/706,138 Docket No.: 0020-5190P January 25, 2005

Art Unit: 2817 Page 5 of 14

capacitance device and a feedback resistor are connected in series,
wherein the diode has a variable impedance characteristic, and
wherein

as defined in Claim 1 the power amplification circuit is used for is a transmitting section.